

**Notice of Allowability**

Application No.

09/898,254

Examiner

James A. Thompson

Applicant(s)

TRELEWICZ ET AL.

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 22 June 2007.
2. ☒ The allowed claim(s) is/are 1,2,5,7,8,11,13,14,17,18,21 and 23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**DAVID MOORE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**

James A. Thompson  
Examiner  
Technology Division 2625

**DETAILED ACTION*****Response to Arguments***

1. Applicant's arguments, see Appeal Brief, filed 22 June 2007, with respect to the rejections under 35 USC §101 and 35 USC §103(a) have been fully considered and are persuasive. The rejections under 35 USC §101 and 35 USC §103(a) set forth in the office action of 29 November 2006 have been withdrawn.

***Allowable Subject Matter***

2. **Claims 1, 2, 5, 7, 8, 11, 13, 14, 17, 18, 21 and 23 are allowed.**

The following is an examiner's statement of reasons for allowance:

Independent claims 1, 7, 17 and 23 each recite defining and scaling a spot function according to an asymmetric shape changing scaling function, and according to other attributes. The spot function is described by the equation:

$$f(x, y) = \frac{1}{2} \left( \cos(\pi x / p_x) + \frac{1}{S(p, r)} \cos(\pi y / p_y) \right)$$

where x and y are the first and second spot function ordinates,  $p_x$  scales ordinate x,  $p_y$  scales ordinate y, p is a spot shape parameter for controlling the shape of the spot,  $S(p, r)$  is a scaling function, and r is the radius of the spot. The function  $S(p, r)$  is a scaling function dependent upon the radius (r) and a spot shape parameter (p). The dependencies of  $S(p, r)$  make the equation  $f(x, y)$  non-separable. The value of  $S(p, r)$  is affected by both x and y ordinate values (since  $r = \sqrt{x^2 + y^2}$ ), and affects the scaling of the second term of the equation. Examiner has not found this form of asymmetrical scaling in the prior art.

The closest prior art discovered is the cited reference Curry (USPN 5,537,223), which also alters a spot shape and spot size based on the gray level value and an elliptical spot function. However, in Curry, the x and y coordinates are separately altered and do not affect each other. The x and y components are independent of each other, unlike the spot function recited in the independent claims of the present application. The asymmetric scaling of the spot function *via* the radially-dependent scaling function is not taught by Curry and has not been discovered by Examiner in any other prior art references. Furthermore, Examiner has found no references that would render the presently recited independent

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claims obvious to one of ordinary skill in the art at the time of the invention, either through combination with Curry or through any other combination of references. Accordingly, independent claims 1, 7, 17 and 23 are deemed allowable over the prior art. Further, claims 2, 5, 8, 11, 13, 14, 18 and 21 are deemed allowable over the prior art due to their respective dependencies from allowable claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James A. Thompson  
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02 August 2007



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